PROCEEDINGS

OF

THE ROYAL SOCIETY.

1840. No. 45.

November 19, 1840.

The MARQUIS of NORTHAMPTON, President, in the Chair.

Edward Kater, Esq., was balloted for, and duly elected a Fellow of the Society.

A paper was read, entitled, Supplement to a paper "On the Theoretical Explanation of an apparent new Polarity in Light;" by George B. Airy, Esq., M.A., F.R.S., Astronomer Royal.

In a paper published in the second part of the Philosophical Transactions for 1840, the author explained, on the undulatory theory of light, the phenomena observed by Sir David Brewster, and apparently indicating a new polarity in light. That explanation was founded on the assumption that the spectrum was viewed out of focus; an assumption which corresponded with the observation of the author and of other persons. But the author having, since the publication of that memoir, been assured by Sir David Brewster that the phenomenon was most certainly observed with great distinctness when the spectrum was viewed so accurately in focus that many of Frauenhofer's finer lines could be seen, he has continued the theoretical investigation for that case, which had been omitted in the former memoir, namely, when the spectrum is viewed in focus; and he has arrived at a result, which appears completely to reconcile the seemingly conflicting statements, and to dispel the obscurity in which the subject had hitherto been enveloped.

November 26, 1840.

Sir JOHN BARROW, Bart., Vice-President, in the Chair.

The following gentlemen were, by ballot, elected Auditors of the Treasurer's Accounts, on the part of the Society, viz. William Thomas Brande, Esq.; Richard Bright, M.D.; William Henry Fitton, M.D.; Lieut.-Colonel William Henry Sykes; and the Rev. Robert Willis, M.A.